

175671 GEN

6

EXECUTIVE SUMMARY

Site Name and Location

Hi Mill Manufacturing  
1074 Highland Road  
Highland, Michigan 48031

OK to  
inspect  
J. Boyle  
12-13-84

OK  
DNR  
12-13-84

County: Oakland  
Michigan Code Number: 63-03N-07E-23AB  
DNR District: Detroit  
EPA ID Number: MID 005341714

From 1946, when operations began, to approximately 1981 the company discharged process water to an unlined holding pond. When this practice ceased they began disposing of the water (containing metals) by spray evaporation around the pond area. This practice ceased in November 1983, and disposal now is handled by a licensed waste hauler.

At various times the pond overflowed into a marsh east of the site. Although the marsh is near a large lake, there is no surface water connection between the two. However, groundwater contamination is known, and samples of lake waters have contained metals. Contamination of the water and sediments in the marsh is also known.

Sludges and sediments in the pond have been removed down to clay, and the hole filled in with "clean" fill. This operation has been supervised by the DNR, Hazardous Waste Division (Lynn King).

The company fabricates tubular aluminum and copper parts. It is located in the Highland Recreation area, about 1.5 miles east of Highland (population less than 1000), 1980 census).

Follow Up Recommendation for EPA

Groundwater, Surface water and soil contamination are known, so, despite the severity of the problem, this site has been given a "medium" priority for inspection. It should be scored immediately for possible inclusion on the CERCLA list.

Date: 8-13-84  
Name: Lonnie Lee  
Mark Patrie



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART I - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
M1	D005341714

II. SITE NAME AND LOCATION

01 SITE NAME	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER					
Hill Mill Manufacturing	1074 Highland Rd					
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTRY	08 CONCERN CODE	
Highland	M1	48031	Oakland	DET	125	06
09 COORDINATES LATITUDE	10 LONGITUDE	Highland Quad, 7.5' series				
42°38'59.0"	083°35'33.0"	SW 1/4 of NW 1/4 SEC 23 T3N R7E				
10 DIRECTIONS TO SITE						
On M-59 West out of Pontiac, site is on South (Left) side approximately 1/2 mile west of Waterbury Rd (or, ~1 mile W of East Highland)						

III. RESPONSIBLE PARTIES

01 OWNER	02 STREET		
Robert Beard, Pres. Hill Mill Manufacturing Co.	1704 Highland Rd		
03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Highland	M1	48031	(313) 887-4191
07 OPERATOR	08 STREET		
Same			
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER

13 TYPE OF OWNERSHIP

A. PRIVATE  B. FEDERAL \_\_\_\_\_  
 C. OTHER \_\_\_\_\_  
C.G. STATE C.G. COUNTY C.G. MUNICIPAL  
C.G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE

A. RCRA 3001 DATE RECEIVED: 09/12/80  B. UNCONTROLLED WASTE SITE/CAROLINA DATE RECEIVED:  C. NONE  
MORTH DAY YEAR MORTH DAY YEAR MORTH DAY YEAR

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION	02 STATUS	03 YEARS OF OPERATION	04 PRIORITY ASSESSMENT
<input type="checkbox"/> YES DATE 06/13/84 <input type="checkbox"/> NO	<input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input type="checkbox"/> C. LOCAL HEALTH OFFICIAL <input type="checkbox"/> D. OTHER	1946 —	<input type="checkbox"/> E. STATE <input type="checkbox"/> F. OTHER CONTRACTOR CONTRACTOR NAME(S): _____
<input type="checkbox"/> G. ACTIVE <input type="checkbox"/> H. INACTIVE <input type="checkbox"/> I. UNKNOWN			<input type="checkbox"/> J. UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Heavy Metals from manufacturing, anodizing of aluminum, copper parts.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

groundwater, surface water, soils, direct contact, worker exposure, food chain contamination, floral & faunal damage

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION	02 PRIORITY FOR ASSESSMENT	03 PRIORITY FOR REMEDIATION
<input type="checkbox"/> A. HIGH <input type="checkbox"/> B. MEDIUM <input type="checkbox"/> C. LOW	<input type="checkbox"/> D. HIGH <input type="checkbox"/> E. MEDIUM <input type="checkbox"/> F. LOW	<input type="checkbox"/> G. HIGH <input type="checkbox"/> H. MEDIUM <input type="checkbox"/> I. LOW

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 ORGANIZATION	03 TELEPHONE NUMBER		
Lynn King	DNR - Hazardous Waste, Detroit	(313) 256-1850		
04 PERSON RESPONSIBLE FOR ASSESSMENT	05 ASSESSOR	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
2-7-81	MNR	CWQD 1	(313) 323-4800	8-19-81



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 2 - WASTE INFORMATION

I. IDENTIFICATION  
01 STATE / 02 SITE NUMBER  
**MI D005341714**

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES		02 WASTE QUANTITY AT SITE	03 WASTE CHARACTERISTICS		
<input type="checkbox"/> A. SOLID	<input type="checkbox"/> E. SLURRY	UNITS OF WASTE QUANTITY TONS	<input type="checkbox"/> A. TOXIC	<input type="checkbox"/> E. SOLUBLE	<input type="checkbox"/> I. HIGHLY VOLATILE
<input type="checkbox"/> B. POWDER, FAMES	<input type="checkbox"/> F. LIQUID	4400	<input type="checkbox"/> B. CORROSIVE	<input type="checkbox"/> F. INFLAMMABLE	<input type="checkbox"/> J. EXPLOSIVE
<input type="checkbox"/> C. SLUDGE	<input type="checkbox"/> G. GAS	CUIC YARDS	<input type="checkbox"/> C. RADIOACTIVE	<input type="checkbox"/> G. FLAMMABLE	<input type="checkbox"/> K. REACTIVE
<input type="checkbox"/> D. OTHER	<u>Contaminated Soils</u>	VOL. OF DRUMS	<input type="checkbox"/> D. PERSISTENT	<input type="checkbox"/> H. IGNITABLE	<input type="checkbox"/> L. INCOMPATIBLE
	300m				<input type="checkbox"/> M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
CLW	OILY WASTE	Unknown..		
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
OC	INORGANIC CHEMICALS	Unknown..		
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	4400	CY	

IV. HAZARDOUS SUBSTANCES (See Assessment for more information on CAS numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
10C	Al	7429-90-5	SI	42.500	mg/L
MES	Cr	7440-47-3	SI	0.600	
MES	Cu	7440-50-8	SI	1.050	
HES	Ni	7440-02-0	SI	0.065	
MES	Zn	7440-66-6	SI	1.100	
HES	Ba	7440-39-3	SI	0.51	µg/L
HES	Cd	7440-43-9	SI	0.15	
HES	Se	7782-44-2	SI	0.015	
LES	Ag	7440-22-4	SI	0.010	
10C	CN-	7440-01-8	SI	0.44	
OLW	Oil & Grease	999	SI	1.0	mg/L

V. FEEDSTOCKS (See Assessment for CAS numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FOS			FOS		
FOS			FOS		
FOS			FOS		
FOS			FOS		

VI. SOURCES OF INFORMATION (See Assessment for more information)

All 4 below in DAIR files, R. t. section

- (1) Max concentrations from monitor wells, 4/17/84
- (2) 9/7/83 sample of water in holding pond (Cr, Cu and Zn also quantified)
- (3) 9/7/83 sample of sludge in holding pond (Ba, Cd and Zn also quantified)
- (4) 9/14/83 Sample of water in H. Pond (by company's consultant)



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

IDENTIFICATION

01 STATE: MI 02 SITE NUMBER: D005341714

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 E. A. GROUNDWATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 11,700

02 E. OBSERVED DATE: 4-12-84

E POTENTIAL

E ALLEGED

04 NARRATIVE DESCRIPTION

Metals found in monitor wells.

01 E. B. SURFACE WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 11,700

02 E. OBSERVED DATE: 4-26-84

E POTENTIAL

E ALLEGED

04 NARRATIVE DESCRIPTION

Water samples on this date contained detectable concentrations of Zn, Cr & Cu in middle of marsh, and As & Cu in Waterbury Lake Inlet/outlet

01 E. C. CONTAMINATION OF AIR

03 POPULATION POTENTIALLY AFFECTED:

02 E. OBSERVED DATE:

E POTENTIAL

E ALLEGED

04 NARRATIVE DESCRIPTION

Company operates under Air Quality Permit. Suspected source of metals in discharge to the marsh is settling off "soot" on the roof, then washed off by rain.

01 E. D. PREEXPLOSIVE CONDITIONS

03 POPULATION POTENTIALLY AFFECTED:

02 E. OBSERVED DATE:

E POTENTIAL

E ALLEGED

04 NARRATIVE DESCRIPTION

01 E. E. DIRECT CONTACT

03 POPULATION POTENTIALLY AFFECTED: 1290

02 E. OBSERVED DATE:

E POTENTIAL

E ALLEGED

04 NARRATIVE DESCRIPTION

Site is fenced, but marsh and lake are not. Soils in marsh, and water in marsh and lake have contained metals see B above, JK&H hel

01 E. F. CONTAMINATION OF SOIL

03 AREA POTENTIALLY AFFECTED: ~10

02 E. OBSERVED DATE: 10-75

E POTENTIAL

E ALLEGED

04 NARRATIVE DESCRIPTION

Marsh sediments contain metals. After abandoning lagoon (now excavated and filled with clean sediments), company sprayed process water over ground to dispose of it. 4-26-84 Sediments on site also contain

01 E. G. DRINKING WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 11,700

02 E. OBSERVED DATE:

E POTENTIAL

E ALLEGED

04 NARRATIVE DESCRIPTION

Ground contamination is known, no municipal supply for any residents within 3 miles, all private wells (probably in glacial drift, as Hillford munic. supply is).

01 E. H. WORKER EXPOSURE/INJURY

03 WORKERS POTENTIALLY AFFECTED: 20

02 E. OBSERVED DATE:

E POTENTIAL

E ALLEGED

04 NARRATIVE DESCRIPTION

Metals settling on roof (see C above) could settle elsewhere on site. Company has well on site for drinking

01 E. I. POPULATION EXPOSURE/INJURY

03 POPULATION POTENTIALLY AFFECTED:

02 E. OBSERVED DATE:

E POTENTIAL

E ALLEGED

04 NARRATIVE DESCRIPTION

Too many possibilities to list.

**SEPA**
**POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT**
**PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS**
**L. IDENTIFICATION**

 01 STATE/02 SITE NUMBER  
**MI D005341714**
**II. HAZARDOUS CONDITIONS AND INCIDENTS**
01  L DAMAGE TO FLORA02  OBSERVED (DATE 6-19-86)  POTENTIAL  ALLEGED

04 NARRATIVE DESCRIPTION Law Conservation Officer witnessed a flow of clear water from out of the ground and into the marsh. (An employee alleges source to be 2 underground drains from parking lot). Officer witnessed foamy liquid entering one drain from eaves troughs (medium rain). At point of discharge into marsh, a thick white cloud formed, and vegetation was locally absent.

01  K DAMAGE TO FAUNA02  OBSERVED (DATE \_\_\_\_\_)  POTENTIAL  ALLEGED

04 NARRATIVE DESCRIPTION

The marsh affected (See J. above) drains into Waterbury Lake, giving potential for fish and bird damage in wetlands habitat.

01  L CONTAMINATION OF FOOD CHAIN02  OBSERVED (DATE \_\_\_\_\_)  POTENTIAL  ALLEGED

04 NARRATIVE DESCRIPTION

Waterbury Lake is undoubtedly used for sport fishing. Potential contamination of lake means potential for fish contamination. No surface connection between marsh and lake at all - D.Kenesa, DNR

01  M UNSTABLE CONTAINMENT OF WASTES02  OBSERVED (DATE 4-26-78)  POTENTIAL  ALLEGED03 POPULATION POTENTIALLY AFFECTED 11,700

04 NARRATIVE DESCRIPTION

DNR personnel witnessed direct overflow from lagoon (holding pond) to the marsh. Prior overflows Dec 1976 and Nov 1977

01  N DAMAGE TO OPPONENT PROPERTY02  OBSERVED (DATE 6-19-86)  POTENTIAL  ALLEGED

04 NARRATIVE DESCRIPTION

Flora damage witnessed. Several instances of direct runoff to marsh witnessed.

01  O CONTAMINATION OF SEWERS, STORM DRAINS, WATERS02  OBSERVED (DATE \_\_\_\_\_)  POTENTIAL  ALLEGED

04 NARRATIVE DESCRIPTION

01  P. ILLEGAL/UNAUTHORIZED DUMPING02  OBSERVED (DATE \_\_\_\_\_)  POTENTIAL  ALLEGED

04 NARRATIVE DESCRIPTION

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED 11,700
**IV. COMMENTS**

4-26-84 Sediment sample at M-59 on site showed (mg/kg dry total):  
 Al - 29,200. Cd - 11.0 Cr 19900. Pb 269.  
 As - 7.5 Cu 2350. Mn 360. Zn 1800. Total solids 13%  
 Ni 50.

**V. SOURCES OF INFORMATION**

DNR, Remedial Action Files.

DNR Surface Water Quality-Surveillance 1517/373-2867